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* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	OCT 23	The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded
NEWS 4	OCT 30	CHEMLIST enhanced with new search and display field
NEWS 5	NOV 03	JAPIO enhanced with IPC 8 features and functionality
NEWS 6	NOV 10	CA/CAplus F-Term thesaurus enhanced
NEWS 7	NOV 10	STN Express with Discover! free maintenance release Version 8.01c now available
NEWS 8	NOV 20	CAS Registry Number crossover limit increased to 300,000 in additional databases
NEWS 9	NOV 20	CA/CAplus to MARPAT accession number crossover limit increased to 50,000
NEWS 10	DEC 01	CAS REGISTRY updated with new ambiguity codes
NEWS 11	DEC 11	CAS REGISTRY chemical nomenclature enhanced
NEWS 12	DEC 14	WPIDS/WPINDEX/WPIX manual codes updated
NEWS 13	DEC 14	GBFULL and FRFULL enhanced with IPC 8 features and functionality
NEWS 14	DEC 18	CA/CAplus pre-1967 chemical substance index entries enhanced with preparation role
NEWS 15	DEC 18	CA/CAplus patent kind codes updated
NEWS 16	DEC 18	MARPAT to CA/CAplus accession number crossover limit increased to 50,000
NEWS 17	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS 18	DEC 27	CA/CAplus enhanced with more pre-1907 records
NEWS 19	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS 20	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS 21	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS 22	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data

NEWS EXPRESS	NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8
NEWS X25	X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:45:37 ON 19 JAN 2007

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

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DICTIONARY FILE UPDATES: 17 JAN 2007 HIGHEST RN 917745-84-7

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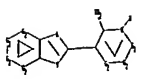
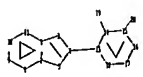
=>
Uploading C:\Program Files\Stnexp\Queries\10508760b.str





chain nodes :
19 20
ring nodes :
1 2 3 4 5 8 9 10 11 13 14 15 16 17 18
chain bonds :

4-13 14-19 15-20
ring bonds :
1-3 1-2 1-11 2-5 2-8 3-4 4-5 8-9 9-10 10-11 13-14 13-18 14-15 15-16
16-17 17-18
exact/norm bonds :
1-3 1-2 1-11 2-5 2-8 3-4 4-5 4-13 8-9 9-10 10-11 13-14 13-18 14-15
14-19 15-16 15-20 16-17 17-18
isolated ring systems :
containing 1 : 13 :

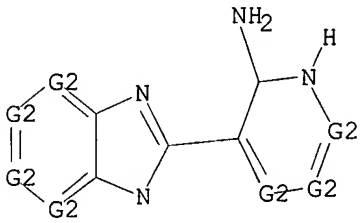
G1:C,O,S,N

G2:C,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 8:Atom 9:Atom 10:Atom 11:Atom 13:Atom
14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS 20:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 C,O,S,N

G2 C,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 10:46:15 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 132 TO ITERATE

100.0% PROCESSED 132 ITERATIONS 5 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1951 TO 3329
PROJECTED ANSWERS: 5 TO 234

L2 5 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 10:46:20 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2929 TO ITERATE

100.0% PROCESSED 2929 ITERATIONS 101 ANSWERS
SEARCH TIME: 00.00.01

L3 101 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 172.10 172.31

FILE 'CAPLUS' ENTERED AT 10:46:24 ON 19 JAN 2007
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FILE COVERS 1907 - 19 Jan 2007 VOL 146 ISS 5
FILE LAST UPDATED: 18 Jan 2007 (20070118/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

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=> s l3 full
L4 22 L3

=> s l4 and py<2002
21881270 PY<2002
L5 12 L4 AND PY<2002

=> d ibib abs hitstr tot

L5 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:894183 CAPLUS
DOCUMENT NUMBER: 134:222689
TITLE: Heterocyclic fused rings with bridgehead nitrogen atoms: single-step synthesis of azolo[1",2":1',2']pyrido[5',6':5,4]pyrimido[1,6-a]benzimidazole; pyrido[1,2-a]benzimidazole; pyrido[4",5":2',3']pyrido[6',5':4,5]pyrimido[1,6-a]benzimidazole and polysubstituted pyridine derivatives
AUTHOR(S): Raslan, M. A.
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, South Valley University, Aswan, 81528, Egypt
SOURCE: Journal of the Chinese Chemical Society (Taipei) (2000), 47(4B), 961-965
CODEN: JCCTAC; ISSN: 0009-4536
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:222689
GI

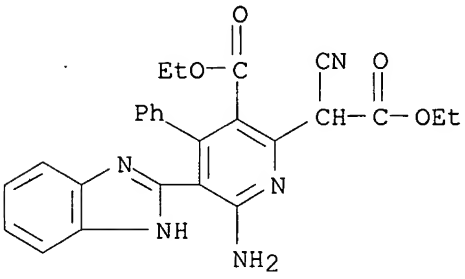
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds., e.g. I-II (R = Ph, 4-MeOC6H4) and III, were prepared by reaction of arylidene-1H-benzimidazol-2-ylacetonitriles with 2-(cyanomethyl)benzimidazoles.

IT 329352-98-9P 329353-01-7P 329353-08-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of azolopyridopyrimidobenzimidazoles, pyridobenzimidazoles, pyridopyridopyrimidobenzimidazoles, and polysubstituted pyridines)

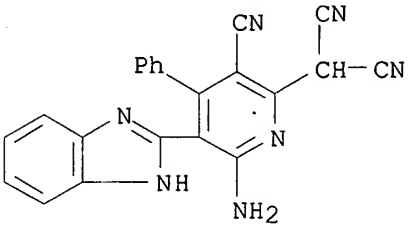
RN 329352-98-9 CAPLUS

CN 2-Pyridineacetic acid, 6-amino-5-(1H-benzimidazol-2-yl)-α-cyano-3-(ethoxycarbonyl)-4-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



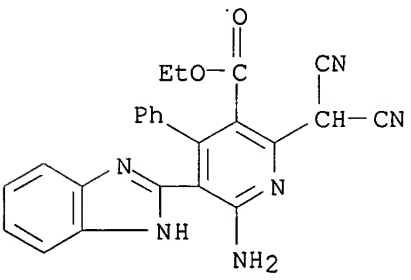
RN 329353-01-7 CAPLUS

CN Propanedinitrile, [6-amino-5-(1H-benzimidazol-2-yl)-3-cyano-4-phenyl-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 329353-08-4 CAPLUS

CN 3-Pyridinecarboxylic acid, 6-amino-5-(1H-benzimidazol-2-yl)-2-(dicyanomethyl)-4-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



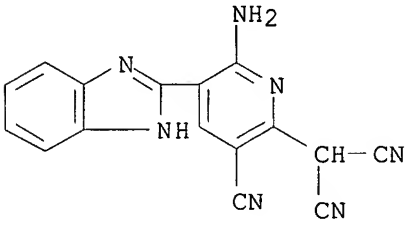
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:51829 CAPLUS
DOCUMENT NUMBER: 132:222418

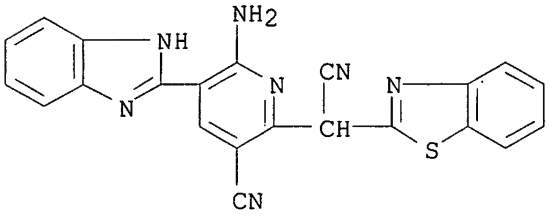
TITLE: Activated nitriles in heterocyclic synthesis: a novel synthesis of polyfunctionally substituted pyridine derivatives
AUTHOR(S): Fadda, Ahmed A.; Refat, Hala M.
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Mansoura University, Mansoura, Egypt
SOURCE: Monatshefte fuer Chemie (1999), 130(12), 1487-1492
CODEN: MOCMB7; ISSN: 0026-9247
PUBLISHER: Springer-Verlag Wien
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:222418

AB A variety of polyfunctionally substituted pyridines were prepared by reacting enamino nitriles with formaldehyde and active methylene reagents or cinnamonitrile derivs.

IT 260996-88-1P 260996-97-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(polyfunctionally substituted pyridines from enamino nitriles)
RN 260996-88-1 CAPLUS
CN Propanedinitrile, [6-amino-5-(1H-benzimidazol-2-yl)-3-cyano-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 260996-97-2 CAPLUS
CN 2-Benzothiazoleacetonitrile, α-[6-amino-5-(1H-benzimidazol-2-yl)-3-cyano-2-pyridinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:398002 CAPLUS
DOCUMENT NUMBER: 122:207474
TITLE: Chemical properties of the ultimate metabolites of 2-amino-5-phenylpyridine (PHE-P-1) and its ortho-methyl derivative
AUTHOR(S): Saris, C. P.; van Dijk, W. J.; Westra, J. G.; Hamzink, M. R. J.; van de Werken, G.; Zomer, G.; Stavenuiter, J. F. C.
CORPORATE SOURCE: The Netherlands Cancer Institute, Division of Molecular Carcinogenesis, 121 Plesmanlaan, CX Amsterdam, 1066, Neth.
SOURCE: Chemico-Biological Interactions (1995),

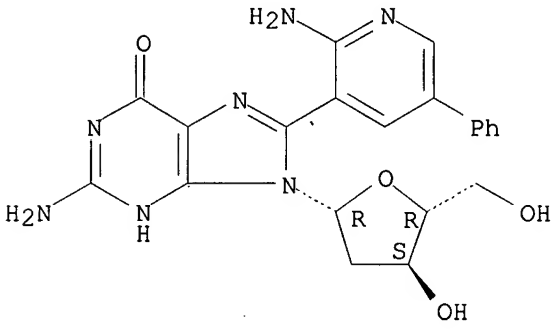
95(1,2), 29-40
CODEN: CBINA8; ISSN: 0009-2797
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The reactivity of the N-acetoxy metabolite of 2-amino-5-phenylpyridine (Phe-P-1), a pyrolysis product of phenylalanine, towards 2'-deoxyguanosine (dG), 2'-deoxyguanosine 3'-monophosphate (dGMP) and DNA was studied and compared with that of the ortho-Me derivative Reaction of 2-acetoxyamino-5-phenylpyridine (N-OAc-APP) with dG resulted in substitution at the 8-position of this nucleoside by the ortho carbon of the amine. The major reaction, however, was acetylation of dG. In contrast, 2-acetoxyamino-3-methyl-5-phenylpyridine (N-OAc-MeAPP) mainly attacked the 8-position of dG by the exocyclic nitrogen and hardly any acetylation of the nucleoside occurred. The adducts were chromatog. isolated and characterized by their mass and NMR spectra. Upon reaction of N-acetoxy compds. with DNA and dGMP, formation of the same adducts was observed, besides the formation of minor amts. of unidentified compds., as was established by 32P- postlabelling anal. The amount of DNA-bound amine, formed by the interaction of N-OAc-APP with DNA, was .apprx.15 times smaller than that observed after the reaction with the corresponding ortho-Me derivative under the same conditions.

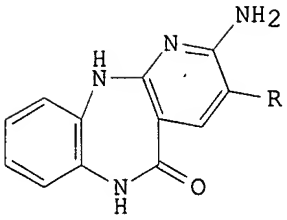
IT 162021-39-8
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(metabolites of aminophenylpyridine and its ortho-Me derivative with deoxyguanosine and DNA)

RN 162021-39-8 CAPLUS
CN Guanosine, 8-(2-amino-5-phenyl-3-pyridinyl)-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:457478 CAPLUS
DOCUMENT NUMBER: 121:57478
TITLE: A novel synthesis of pyrido[2,3-b][1,5]benzodiazepines
AUTHOR(S): Okamoto, Yoshihisa; Zama, Yoshimi; Takagi, Kaname; Kurasawa, Yoshihisa; Aotsuka, Tomoji
CORPORATE SOURCE: Coll. Lib. Arts Sci., Kitasato Univ., Sagamihara, 228, Japan
SOURCE: Journal of Heterocyclic Chemistry (1994), 31(1), 49-52
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 121:57478
GI



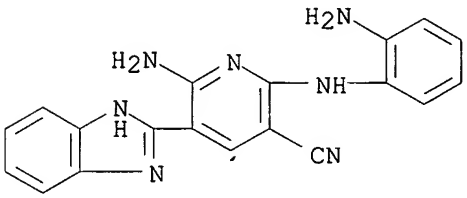
I

AB A novel and convenient preparation of the title compds. I (R = cyano, amido, pyridinyl, etc.) was described, involving the ring transformation of 1,5-benzodiazepine derivs. with active methylene compds.

IT 128719-99-3P, 3-Pyridinecarbonitrile, 6-amino-2-[(2-aminophenyl)amino]-5-(1H-benzimidazol-2-yl)- 156138-70-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for pyrido[2,3-b][1,5]benzodiazepine)

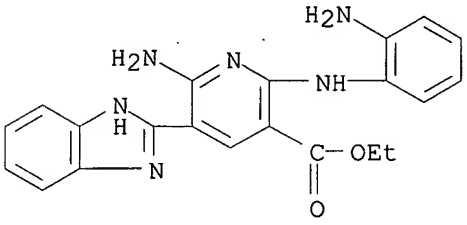
RN 128719-99-3 CAPLUS

CN 3-Pyridinecarbonitrile, 6-amino-2-[(2-aminophenyl)amino]-5-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



RN 156138-70-4 CAPLUS

CN 3-Pyridinecarboxylic acid, 6-amino-2-[(2-aminophenyl)amino]-5-(1H-benzimidazol-2-yl)-, ethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:531123 CAPLUS

DOCUMENT NUMBER: 117:131123

TITLE: Reaction of benzimidazole-2-acetonitrile with carbonyl compounds

AUTHOR(S): Osman, S. A. M.; Hammad, M.; Swellem, R.; Shalaby, A. M.

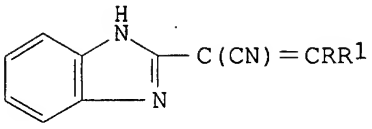
CORPORATE SOURCE: Natl. Res. Cent., Cairo, Egypt

SOURCE: Egyptian Journal of Chemistry (1990), Volume Date 1988, 31(6), 735-41
CODEN: EGJCA3; ISSN: 0367-0422

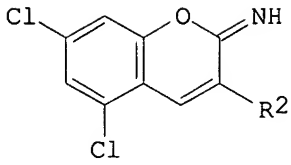
DOCUMENT TYPE: Journal

LANGUAGE: English

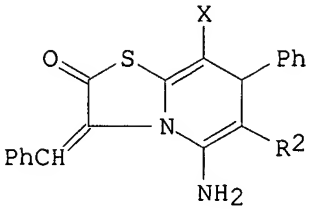
GI



II



III



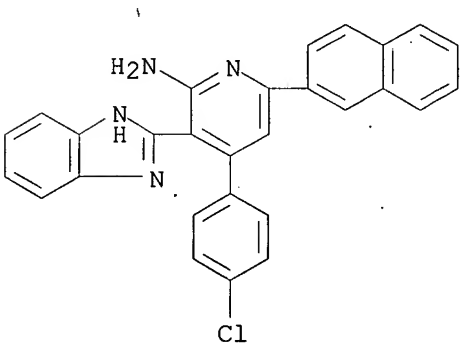
IV

AB Condensation of benzimidazole-2-acetonitrile (I) with RCOR1 [R = 2-thienyl, Ph, p-MeOC6H4, p-MeC6H4, R1 = Me; RR1 = (CH2)5] in toluene containing NH4OAc gave 70-80% benzimidazole-2-acrylonitriles II; similar treatment with 3,5-dichlorosalicyaldehyde gave 75% benzopyran derivative III (R2 = benzimidazol-2-yl) which was acidified by concentrated HCl to give 80% of the corresponding coumarin derivative Condensation of RCOCH:CHR1 (R = 2-C10H7, R1 = p-ClC6H4) with I gave 75% R2CH(CN)CHR1CH2COR (R2 = 2-benzimidazolyl). Addnl. obtained were 85 and 80% imidazopyridine IV (X = CO2Et, CN).

IT 142888-35-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 142888-35-5 CAPLUS

CN 2-Pyridinamine, 3-(1H-benzimidazol-2-yl)-4-(4-chlorophenyl)-6-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:478108 CAPLUS

DOCUMENT NUMBER: 113:78108

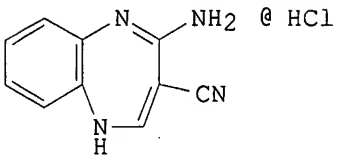
TITLE: Ring transformation of 4-amino-1H-1,5-benzodiazepine-3-carbonitrile with active methylene compounds. A novel 1,3-migration of a cyano group in 1-amino-1-(2-aminoanilino)-2,4-dicyano-4-ethoxycarbonylbuta-1,3-diene

AUTHOR(S): Okamoto, Yoshihisa; Zama, Yoshimi; Itoh, Toshihiro; Aotsuka, Tomoji; Kurasawa, Yoshihisa; Takagi, Kaname

CORPORATE SOURCE: Coll. Lib. Arts Sci., Kitasato Univ., Sagamihara, 228, Japan

SOURCE: Journal of Chemical Research, Synopses (1990), (5), 136-7

CODEN: JRPSDC; ISSN: 0308-2342
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 113:78108
GI



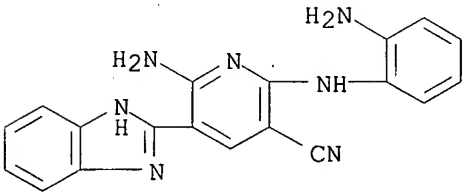
I

AB The ring transformations of 4-amino-1H-1,5-benzodiazepine-3-carbonitrile hydrochloride (I) with active methylene compds. are described. The contraction to a pyridine ring was readily accomplished with DBU as a catalyst. An alternative 1,3-rearrangement between the CN and CO2Et groups seemingly occurs in 2-H2NC6H4NHC(NH2):C(CN)CH:C(CN)CO2Et, for which a probable mechanism involves electrocyclic reaction, followed by ring opening.

IT 128719-99-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 128719-99-3 CAPLUS

CN 3-Pyridinecarbonitrile, 6-amino-2-[(2-aminophenyl)amino]-5-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



L5 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:231657 CAPLUS
DOCUMENT NUMBER: 110:231657
TITLE: Preparation of heterocyclyl imidazopyridines and -purines as cardiovascular agents
INVENTOR(S): Hauel, Norbert; Heider, Joachim; Diederen, Willi; Van Meel, Jacques
PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Fed. Rep. Ger.
SOURCE: Ger. Offen., 15 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3722992	A1	19890119	DE 1987-3722992	19870711 <--

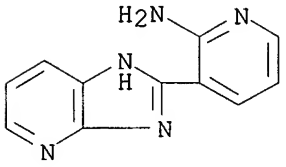
PRIORITY APPLN. INFO.: DE 1987-3722992 19870711
OTHER SOURCE(S): CASREACT 110:231657; MARPAT 110:231657
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; AB = atoms to complete a pyridine or pyrimidine ring; R = (un)substituted C-attached heterocyclyl] were prepared 3,4-Diaminopyridine was refluxed .apprx.3.5 h with 2,6-dimethoxynicotinic

acid in POCl3 to give 10% pyridylimidazopyridine II which gave a 68% increase in coronary contractility with a 25 mmHg lowering of blood pressure in cats receiving 1 mg/kg i.v.. Tablets were prepared each containing II 100.0, lactose 50.0, polyvinylpyrrolidone 5.0, CM-cellulose 19.0, and Mg stearate 1.0 mg.

IT 120800-16-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as cardiovascular agent)

RN 120800-16-0 CAPLUS

CN 2-Pyridinamine, 3-(1H-imidazo[4,5-b]pyridin-2-yl)- (9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:473437 CAPLUS

DOCUMENT NUMBER: 109:73437

TITLE: Preparation of (1H-imidazol-1-ylmethyl)benzimidazoles as inhibitors of androgen biosynthesis

INVENTOR(S): Raeymaekers, Alfons Herman M.; Freyne, Eddy Jean E.; Sanz, Gerard Charles

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: Eur. Pat. Appl., 59 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

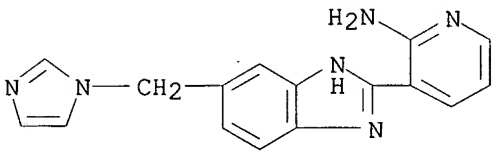
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

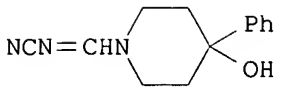
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 260744	A2	19880323	EP 1987-201702	19870909 <--
EP 260744	A3	19890118		
EP 260744	B1	19921216		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4859684	A	19890822	US 1987-78435	19870727 <--
AT 83478	T	19930115	AT 1987-201702	19870909 <--
ES 2053524	T3	19940801	ES 1987-201702	19870909 <--
DK 8704794	A	19880316	DK 1987-4794	19870914 <--
DK 174728	B1	20031006		
FI 8703977	A	19880316	FI 1987-3977	19870914 <--
FI 87781	B	19921113		
FI 87781	C	19930225		
NO 8703840	A	19880316	NO 1987-3840	19870914 <--
NO 167202	B	19910708		
NO 167202	C	19911016		
AU 8778385	A	19880414	AU 1987-78385	19870914 <--
AU 595064	B2	19900322		
HU 45051	A2	19880530	HU 1987-4071	19870914 <--
HU 198039	B	19890728		
JP 01085975	A	19890330	JP 1987-228679	19870914 <--
JP 05087071	B	19931215		
ZA 8706881	A	19890426	ZA 1987-6881	19870914 <--
SU 1662350	A3	19910707	SU 1987-4203300	19870914 <--
IL 83892	A	19911121	IL 1987-83892	19870914 <--
CA 1323366	C	19931019	CA 1987-546763	19870914 <--

CN 87106423 A 19880420 CN 1987-106423 19870915 <--
CN 1020903 B 19930526
PRIORITY APPLN. INFO.: US 1986-907903 A 19860915
EP 1987-201702 A 19870909
OTHER SOURCE(S): CASREACT 109:73437; MARPAT 109:73437
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; A = N:CR2, NR3C(:X); R = H, C1-10 alkyl, R4, R4Z; R1 = H, C1-10 alkyl, C3-7 cycloalkyl(alkyl), C1-10 alkoxy, OH, C3-6 alkenyloxy, C3-6 alkynyloxy, R4, R4O, R4Z, R4Z1, R5Z2, R6Z3; R2 = H, C3-7 cycloalkyl, halo, CO2H, alkoxycarbonyl, (hetero)aroyl, alkanoyl, quinolinyl, indolinyl, R4, R4Z, R4CH(OH), R5Z2, (un)substituted alkyl, alkenyl, PhO; R3 = H, C1-6 alkyl, R6Z; R4 = (amino)pyridinyl, imidazolyl, thiazolyl, (halo)thienyl, (halo)furanyl, (un)substituted Ph; R5 = R4, R6; R6 = (un)substituted Ph; Z = C1-6 alkylene; Z1 = alkenyleneoxy, alkynyleneoxy; Z2 = alkyleneoxy; Z3 = alkynyleneoxy] and their stereoisomers and pharmaceutically acceptable salts were prepared, useful in treatment of androgenic hormone-dependent disorders in mammals. 4-[1-(1H-Imidazol-1-yl)propyl]-1,2-benzenediamine (preparation given) and F3CCO2H were stirred 15 min. at 80° to give 22% (imidazolylpropyl)benzimidazole II. In rats II reduced plasma testosterone levels with an ED50 of <2.5 mg/kg orally.
IT 115574-63-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as androgen inhibitor)
RN 115574-63-5 CAPLUS
CN 2-Pyridinamine, 3-[5-(1H-imidazol-1-ylmethyl)-1H-benzimidazol-2-yl]- (9CI) (CA INDEX NAME)



L5 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:596055 CAPLUS
DOCUMENT NUMBER: 103:196055
TITLE: Antimycotic agents. XVII. Heterocyclically substituted nitriles
AUTHOR(S): Kreutzberger, Alfred; Kreutzberger, Elfriede; Wiedemann, Dagmar
CORPORATE SOURCE: Inst. Pharm., Johannes Gutenberg-Univ., Mainz, D-6500, Fed. Rep. Ger.
SOURCE: Chemiker-Zeitung (1985), 109(4), 153-5
CODEN: CMKZAT; ISSN: 0009-2894
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 103:196055
GI



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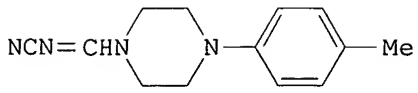
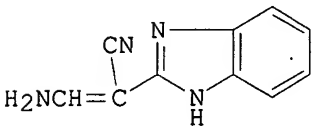
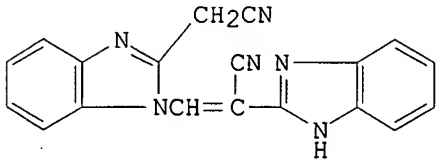


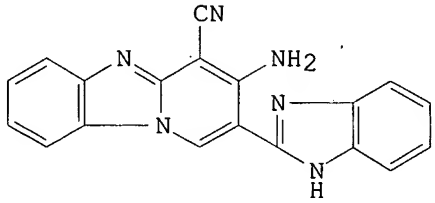
II



III



IV



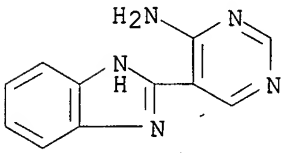
V

AB H2NCN was aminomethynylated with s-triazine to give a product which reacted with 4-hydroxy-4-phenylpiperidine to give the dehydro-N-Mannich base I and with 1-(p-tolyl)piperazine to give piperazine II. In the presence of MeOH, s-triazine and 2-benzimidazolylacetonitrile gave primary product cyanoethene III which was stabilized via intermediate IV to give pyridobenimidazole V. The dehydro-N-Mannich bases are fungicides; II, especially, inhibited Coniophora puteana.

IT 63613-29-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 63613-29-6 CAPLUS

CN 4-Pyrimidinamine, 5-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



L5 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:149217 CAPLUS

DOCUMENT NUMBER: 102:149217

TITLE: Synthesis of 6-arylpyrido[2',3':4,5]pyrimido[1,6-a]benzimidazoles

AUTHOR(S): Reddy, K. Vijayender; Mogilaiah, K.; Sreenivasulu, B.

CORPORATE SOURCE: Dep. Chem., Kakatiya Univ., Warangal, 505 009, India

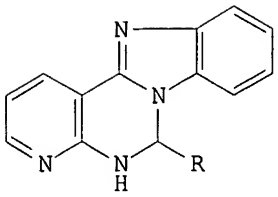
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1984), 23B(11), 1106-7
CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal

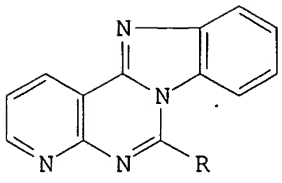
LANGUAGE: English

OTHER SOURCE(S): CASREACT 102:149217

GI



I



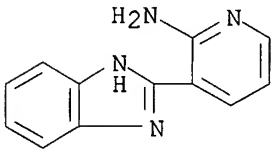
II

AB Refluxing 2-(2-amino-3-pyridyl)benzimidazole with RCHO (R = Ph, 4-MeOC6H4, 4-MeC6H4, 4-ClC6H4, 4-BrC6H4, 3-, 4-O2NC6H4, 2-thienyl) in HOAc gave pyridopyrimidobenzimidazoles I; oxidation of which with KMnO4 in acetone gave the title compds II.

IT 93587-11-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with benzaldehyde, pyridopyrimidobenzimidazole from)

RN 93587-11-2 CAPLUS

CN 2-Pyridinamine, 3-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



L5 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1985:6309 CAPLUS

DOCUMENT NUMBER: 102:6309

TITLE: Synthesis of 2-(2-amino-3-pyridyl)benzimidazoles

AUTHOR(S): Reddy, K. Vijayender; Mogilaiah, K.; Sreenivasulu, B.

CORPORATE SOURCE: Univ. Coll., Kakatiya Univ., Warangal, 506 009, India

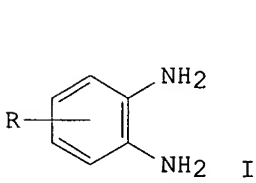
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1984), 23B(9), 866-7
CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal

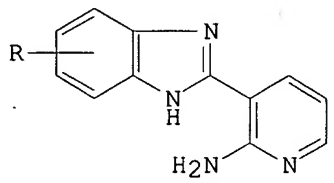
LANGUAGE: English

OTHER SOURCE(S): CASREACT 102:6309

GI



I



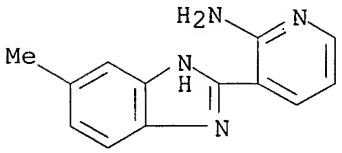
II

AB Refluxing 2-aminonicotinaldehyde with phenylenediamines I (R = H, 5-MeO, 4-Me, 5-Me, 5-Cl, 4-NO2, 5-NO2, 4,6-Cl2, 4,6-Br2, 4-Br-6 Me, 6-Br-4 Me) in EtOH and PhNO2 gave the title compds. II in 55-82% yield. II showed moderate fungicidal and bactericidal activity.

IT 93526-94-4P 93587-11-2P 93587-12-3P
93587-13-4P 93587-14-5P 93587-15-6P

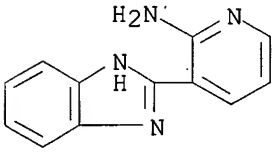
93587-16-7P 93587-17-8P 93587-18-9P
93616-44-5P 93700-91-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, fungicidal, and bactericidal activity of)

RN 93526-94-4 CAPLUS
CN 2-Pyridinamine, 3-[4(or 5)-bromo-6-methyl-1H-benzimidazol-2-yl]- (9CI) (CA INDEX NAME)

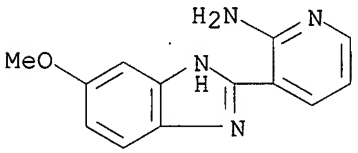


D1—Br

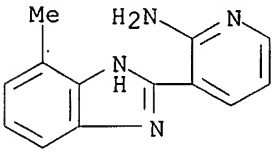
RN 93587-11-2 CAPLUS
CN 2-Pyridinamine, 3-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



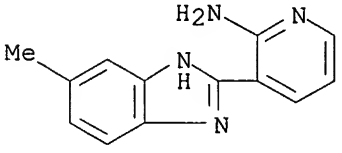
RN 93587-12-3 CAPLUS
CN 2-Pyridinamine, 3-(5-methoxy-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



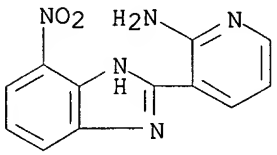
RN 93587-13-4 CAPLUS
CN 2-Pyridinamine, 3-(7-methyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



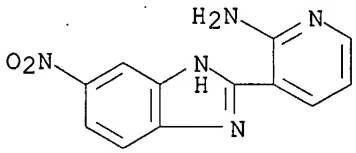
RN 93587-14-5 CAPLUS
CN 2-Pyridinamine, 3-(5-methyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



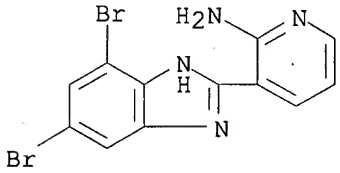
RN 93587-15-6 CAPLUS
CN 2-Pyridinamine, 3-(7-nitro-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



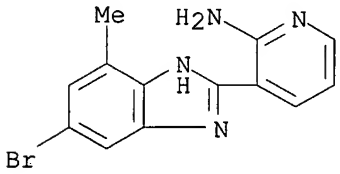
RN 93587-16-7 CAPLUS
CN 2-Pyridinamine, 3-(5-nitro-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



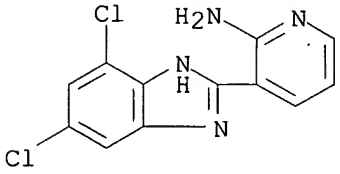
RN 93587-17-8 CAPLUS
CN 2-Pyridinamine, 3-(5,7-dibromo-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



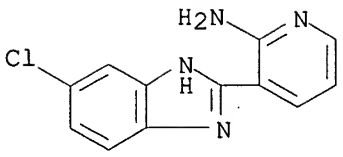
RN 93587-18-9 CAPLUS
CN 2-Pyridinamine, 3-(6-bromo-4-methyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



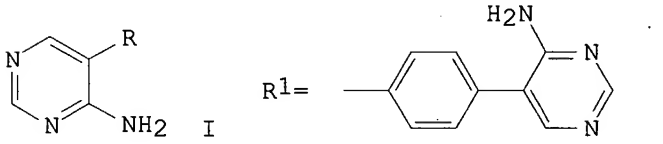
RN 93616-44-5 CAPLUS
CN 2-Pyridinamine, 3-(4,6-dichloro-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



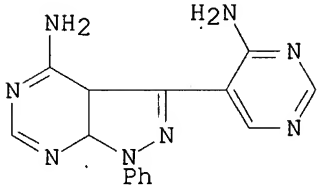
RN 93700-91-5 CAPLUS
CN 2-Pyridinamine, 3-(5-chloro-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



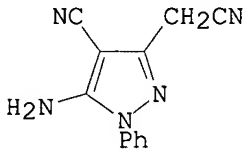
L5 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:484940 CAPLUS
DOCUMENT NUMBER: 87:84940
TITLE: 5-Substituted 4-aminopyrimidines by aminomethinylation of acetonitriles
AUTHOR(S): Kreutzberger, Alfred; Wiedemann, Dagmar
CORPORATE SOURCE: Inst. Pharm., Freie Univ. Berlin, Berlin, Fed. Rep. Ger.
SOURCE: Justus Liebigs Annalen der Chemie (1977), (4), 537-44
CODEN: JLACBF; ISSN: 0075-4617
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 87:84940
GI



I



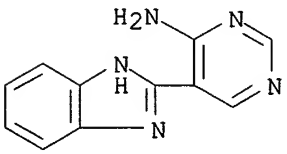
II



III

AB 4-Aminopyrimidines I [R = 2-thienyl, indol-3-yl, 4-FC6H4, 3,4-(MeO)2C6H3, 4-PhC6H4, 2-naphthyl, 1-cyclopenten-1-yl, 1-cyclohexen-1-yl, 2-benzimidazolyl] were prepared in 6-58% yields by treating s-triazine with CH2-active RCH2CN. The intermediary H2NCH:CRCN (R = 1-cyclopenten-1-yl, 1-cyclohexen-1-yl, 2-benzimidazolyl) were isolable. Also prepared were 68% I (R = R1) from p-NCCH2C6H4CH2CN and 28% pyrazolopyrimidine II from pyrazole III.

IT 63613-29-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 63613-29-6 CAPLUS
CN 4-Pyrimidinamine, 5-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



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=> d his

     (FILE 'HOME' ENTERED AT 10:45:37 ON 19 JAN 2007)

     FILE 'REGISTRY' ENTERED AT 10:45:52 ON 19 JAN 2007
L1             STRUCTURE UPLOADED
L2           5 S L1
L3         101 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 10:46:24 ON 19 JAN 2007
L4          22 S L3 FULL
L5          12 S L4 AND PY<2002

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    72.30     244.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -9.36      -9.36

STN INTERNATIONAL LOGOFF AT 10:55:39 ON 19 JAN 2007
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Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTANXR1625

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	OCT 23	The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded
NEWS	4	OCT 30	CHEMLIST enhanced with new search and display field
NEWS	5	NOV 03	JAPIO enhanced with IPC 8 features and functionality
NEWS	6	NOV 10	CA/CAplus F-Term thesaurus enhanced
NEWS	7	NOV 10	STN Express with Discover! free maintenance release Version 8.01c now available
NEWS	8	NOV 20	CAS Registry Number crossover limit increased to 300,000 in additional databases
NEWS	9	NOV 20	CA/CAplus to MARPAT accession number crossover limit increased to 50,000
NEWS	10	DEC 01	CAS REGISTRY updated with new ambiguity codes
NEWS	11	DEC 11	CAS REGISTRY chemical nomenclature enhanced
NEWS	12	DEC 14	WPIDS/WPINDEX/WPIX manual codes updated
NEWS	13	DEC 14	GBFULL and FRFULL enhanced with IPC 8 features and functionality
NEWS	14	DEC 18	CA/CAplus pre-1967 chemical substance index entries enhanced with preparation role
NEWS	15	DEC 18	CA/CAplus patent kind codes updated
NEWS	16	DEC 18	MARPAT to CA/CAplus accession number crossover limit increased to 50,000
NEWS	17	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS	18	DEC 27	CA/CAplus enhanced with more pre-1907 records
NEWS	19	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS	20	JAN 16	CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS	21	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS	22	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data

NEWS EXPRESS	NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8
NEWS X25	X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:34:39 ON 19 JAN 2007

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:34:51 ON 19 JAN 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 JAN 2007 HIGHEST RN 917745-84-7
DICTIONARY FILE UPDATES: 17 JAN 2007 HIGHEST RN 917745-84-7

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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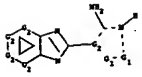

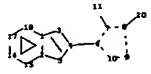

chain nodes :

11 20
ring nodes :
1 2 3 4 5 6 7 8 9 10 15 16 17 18
chain bonds :
4-6 7-11 8-20
ring bonds :
1-3 1-2 1-18 2-5 2-15 3-4 4-5 6-7 6-10 7-8 8-9 9-10 15-16 16-17 17-18

exact/norm bonds :
1-3 1-2 1-18 2-5 2-15 3-4 4-5 4-6 6-7 6-10 7-8 7-11 8-9 8-20 9-10
15-16 16-17 17-18
isolated ring systems :
containing 1 : 6 :

G1:C,O,S,N

G2:C,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 20:CLASS

L1 STRUCTURE UPLOADED

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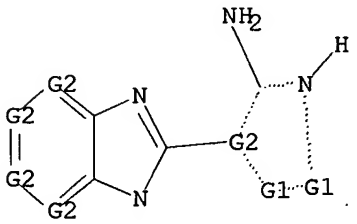
L1 HAS NO ANSWERS
L1 STR



G1 C,O,S,N
G2 C,N

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 10:36:12 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 218 TO ITERATE

100.0% PROCESSED 218 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3475 TO 5245
PROJECTED ANSWERS: 1282 TO 2438

L2 50 SEA SSS SAM L1

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FULL SEARCH INITIATED 10:36:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      4769 TO ITERATE

100.0% PROCESSED     4769 ITERATIONS                          2103 ANSWERS
SEARCH TIME: 00.00.01

L3         2103 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                              173.00     173.21

FILE 'CAPLUS' ENTERED AT 10:36:21 ON 19 JAN 2007
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FILE COVERS 1907 - 19 Jan 2007  VOL 146 ISS 5
FILE LAST UPDATED: 18 Jan 2007  (20070118/ED)

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=> s l3 full
L4          30 L3

=> s l4 and py<2002
      21881270 PY<2002
L5           9 L4 AND PY<2002

=> d ibib abs hitstr tot

L5   ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2002:29417  CAPLUS
DOCUMENT NUMBER:          136:325484
TITLE:                    A mild and efficient synthesis of new benzimidazole
                          derivatives via a one-pot reaction. An addition versus
                          condensation reaction
AUTHOR(S):                El Latif, Fawi M. Abd; Khalil, Mohamed A.; Helmy,
                          Islam; Solieman, Hausien A.
CORPORATE SOURCE:         Chemistry Department, Faculty of Science, South Valley
                          University, Aswan, Egypt
SOURCE:                   Heterocyclic Communications (2001), 7(5),
                          485-492
                          CODEN: HCOMEX; ISSN: 0793-0283
PUBLISHER:                Freund Publishing House Ltd.
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
```

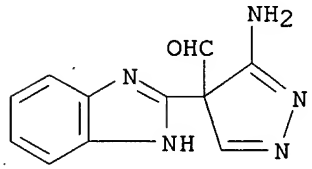
OTHER SOURCE(S): CASREACT 136:325484

AB New polyfunctional benzimidazole derivs. of pharmaceutical interest were prepared starting from 2-cyanomethylbenzimidazole-2,2-dicarboxaldehyde, which reacts easily with different active methylene compds. and nucleophilic reagents. The addition predominantly lead to the cyclic products in competition with the condensation reaction.

IT 415680-43-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(one-pot preparation of benzimidazoles)

RN 415680-43-2 CAPLUS

CN 4H-Pyrazole-4-carboxaldehyde, 3-amino-4-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:634602 CAPLUS

DOCUMENT NUMBER: 135:344430

TITLE: Reactions of methyl 4-aminofurazan-3-carboximidate with nitrogen-containing nucleophiles

AUTHOR(S): Sergievskii, A. V.; Pirogov, S. V.; Mel'nikova, S. F.; Tselinskii, I. V.

CORPORATE SOURCE: St. Petersburg State Institute of Technology, St. Petersburg, 198013, Russia

SOURCE: Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (2001), 37(5), 717-720
CODEN: RJOCEQ; ISSN: 1070-4280

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

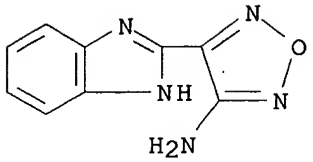
OTHER SOURCE(S): CASREACT 135:344430

AB Me 4-aminofurazan-3-carboximidate reacts with aromatic amines and hydrazines to give the corresponding amidines and amidrazones. The reaction of the title compound with o-phenylenediamine yields 3-amino-4-(2-benzimidazoyl)furazan, and with acylhydrazines N2-acyl-4-aminofurazan-3-carbohydrazides are formed. The latter undergo thermal intramol. cyclization with formation of 3-amino-4-(1,2,4-triazol-3-yl)furazan derivs. containing various substituents in position 5 of the triazole ring.

IT 332026-86-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(reactions of Me aminofurazancarboximidate with nitrogen-containing nucleophiles)

RN 332026-86-5 CAPLUS

CN 1,2,5-Oxadiazol-3-amine, 4-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:516900 CAPLUS
DOCUMENT NUMBER: 135:272933
TITLE: Some reactions with ketene dithioacetals. Part I. Synthesis of antimicrobial pyrazolo[1,5-a]pyrimidines via the reaction of ketene dithioacetals and 5-aminopyrazoles
AUTHOR(S): Zaharan, Medhat A.; El-Sharief, Ahmed M. Sh.; El-Gaby, Mohamed S. A.; Ammar, Yousry A.; El-Said, Usama H.
CORPORATE SOURCE: Chemistry Department, Faculty of Science, Al-Azhar University, Nasr City, Egypt
SOURCE: Farmaco (2001), 56(4), 277-283
CODEN: FRMCE8; ISSN: 0014-827X
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:272933
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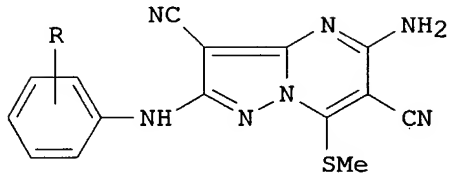
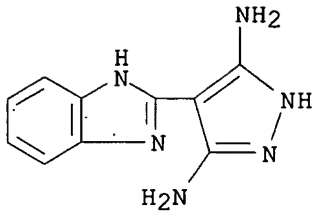


I

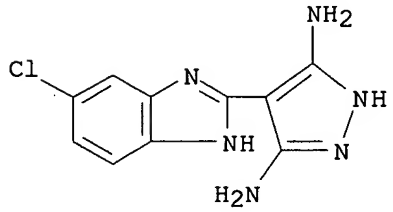
AB Pyrazolo[1,5-a]pyrimidines such as I (R = 2-, 4-OEt) were synthesized via the reaction of ketene dithioacetals and 5-aminopyrazoles. The antibacterial and antifungal activities of some selected compds. were reported.

IT 134259-20-4P 364043-47-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of antimicrobial pyrazolo[1,5-a]pyrimidines via reaction of ketene dithioacetals with 5-aminopyrazoles)

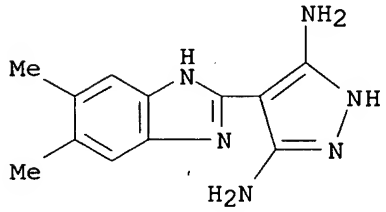
RN 134259-20-4 CAPLUS
CN 1H-Pyrazole-3,5-diamine, 4-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



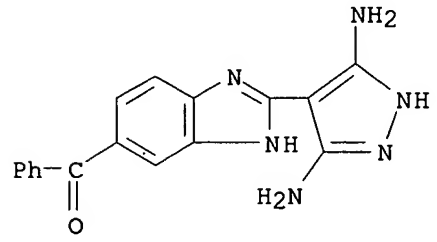
RN 364043-47-0 CAPLUS
CN 1H-Pyrazole-3,5-diamine, 4-(5-chloro-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



IT 134259-21-5P 364043-46-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of antimicrobial pyrazolo[1,5-a]pyrimidines via reaction of ketene dithioacetals with 5-aminopyrazoles)
RN 134259-21-5 CAPLUS
CN 1H-Pyrazole-3,5-diamine, 4-(5,6-dimethyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)

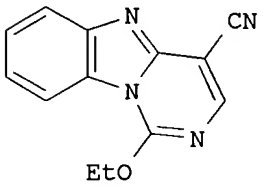


RN 364043-46-9 CAPLUS
CN Methanone, [2-(3,5-diamino-1H-pyrazol-4-yl)-1H-benzimidazol-5-yl]phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:661837 CAPLUS
DOCUMENT NUMBER: 132:35648
TITLE: Structure and properties of ethyl (2-benzimidazolyl)cyanoacetimidate
AUTHOR(S): Yamaguchi, Yoshimi; Okamoto, Yoshihisa; Harada, Kazuho
CORPORATE SOURCE: Center for Natural Sciences, Kitasato University, Sagamihara, 228-8555, Japan
SOURCE: Journal of Heterocyclic Chemistry (1999), 36(4), 841-847
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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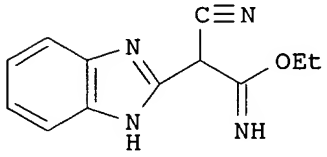

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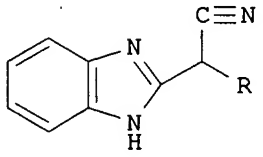
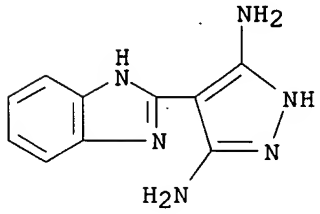


III

AB The structure of the hydrolysis product of the cyanopyrimidobenzimidazole I was revised to be the (benzimidazolyl)cyanoacetimidate II based on crystal structure anal. II reacted with AcOH to give the cyanoacetamide III (R = CONH2). Reaction of II with excess amines R1NH2 (R1 = Bu, benzyl) gave amidines III [R = C(:NH)NHR1, C(:NR1)NHR1].

IT 134259-20-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(mol. structure and reactivity of benzimidazolylcyanoacetimidate, the cyano(ethoxy)pyrimidobenzimidazole hydrolysis product)

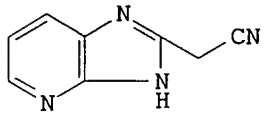
RN 134259-20-4 CAPLUS
CN 1H-Pyrazole-3,5-diamine, 4-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

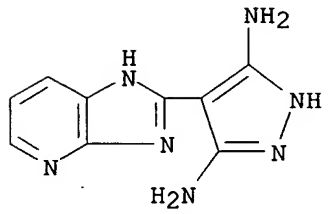
L5 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:409247 CAPLUS
DOCUMENT NUMBER: 121:9247
TITLE: Studies on 2-substituted methylazoles: the preparation

and reactions of 2-cyanomethylimidazo[4,5-b]pyridine
AUTHOR(S): Nawwar, Galal A. M.; Chabaka, Laila M.
CORPORATE SOURCE: Natl. Res. Cent., Cairo, Egypt
SOURCE: Anales de Quimica (1993), 89(3), 375-8
CODEN: ANQUEX; ISSN: 1130-2283
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Direct condensation of 2,3-diaminopyridine with EtO2CCH2CN gave (cyanomethyl)imidazopyridine I which could be used to prepare 2-coumarinyl, pyrazolyl, or pyrano[2,3-c]pyrazolyl derivs. as well as the corresponding hydroximino and diazo compds.
IT 155393-40-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 155393-40-1 CAPLUS
CN 1H-Pyrazole-3,5-diamine, 4-(1H-imidazo[4,5-b]pyridin-2-yl)- (9CI) (CA INDEX NAME)



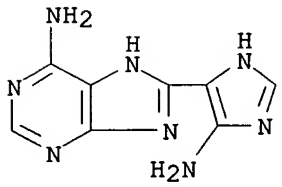
L5 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:509430 CAPLUS
DOCUMENT NUMBER: 115:109430
TITLE: Adenine photodimerization in deoxyadenylate sequences: elucidation of the mechanism through structural studies of a major d(ApA) photoproduct
AUTHOR(S): Kumar, Shiv; Joshi, Prakash C.; Sharma, Narain D.; Bose, Samarendra N.; Davies, R. Jeremy H.; Takeda, Naohito; McCloskey, James A.
CORPORATE SOURCE: Sch. Biol. Biochem., Queen's Univ., Belfast, BT9 7BL, UK
SOURCE: Nucleic Acids Research (1991), 19(11), 2841-7
CODEN: NARHAD; ISSN: 0305-1048
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mechanism of the photodimerization of adjacent adenine bases on the same strand of DNA has been elucidated by determining the structure of 1 of the 2 major photoproducts that are formed by UV irradiation of the deoxydinucleoside monophosphate d(ApA). The photoproduct, denoted d(ApA)*, corresponds to a species of adenine photodimer first described by

D. Poerschke (1973). From a detailed examination of its chemical and spectroscopic properties, including comparisons with the model compound N-cyano-N1-(1-methylimidazol-5-yl)formamidine, it is deduced that d(ApA)* contains a deoxyadenosine unit covalently linked through its C(8) position to C(4) of an imidazole N(1) deoxyribonucleoside moiety bearing an N-cyanoformamidino substituent at C(5). On treatment with acid, d(ApA)* is degraded with high specificity to 8-(5-aminoimidazol-4-yl)adenine whose identity has been confirmed by independent chemical synthesis. It is concluded that the primary event in adenine photodimerization entails photoaddn. of the N(7)-C(8) double bond of the 5'-adenine across the C(6) and C(5) positions of the 3'-adenine. The azetidine species thus generated acts as a common precursor in both types of d(ApA) photoproduct which are formed from it by competing modes of azetidine ring fission.

IT 135792-66-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 135792-66-4 CAPLUS

CN 1H-Purin-6-amine, 8-(5-amino-1H-imidazol-4-yl)- (9CI) (CA INDEX NAME)



L5 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:471468 CAPLUS

DOCUMENT NUMBER: 115:71468

TITLE: Aroylisothiocyanates in heterocyclic synthesis: synthesis of new benzimidazole derivatives with anticipated fungicidal activity

AUTHOR(S): Nawwar, Galal A. M.; Chabaka, Laila M.; Omar, Mahmoud T.

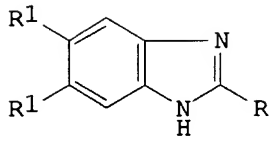
CORPORATE SOURCE: Natl. Res. Cent., Cairo, Egypt

SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (1991), 57(1-2), 65-73
CODEN: PSSLEC; ISSN: 1042-6507

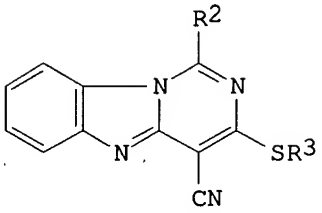
DOCUMENT TYPE: Journal

LANGUAGE: English

GI

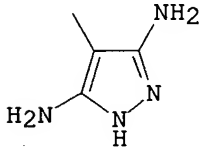


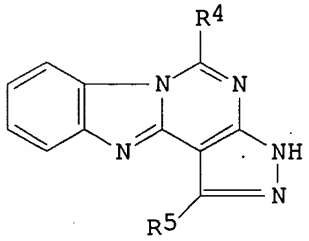
I



III

Q=





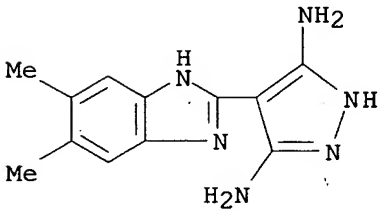
IV

AB The reactions of benzoyl- and furoylisothiocyanate with 2-(cyanomethyl)benzimidazoles lead to the formation of 1:1 adducts I [R = C(CN):C(SH)NHCOR2, R1 = H, Me, R2 = Ph, 2-furyl] (II) and the corresponding α-aroyl derivs. I [R = C(CN):C(OH)R2, R1 = H, Me]. II (R1 = H, R2 = Ph, 2-furyl) cyclized affording pyrimido [3,4-a]benzimidazole derivs. III (R3 = Me, Et). They also afforded (pyrazol-4-yl)benzimidazole derivs. I (R = Q, R1 = H, Me) when II (R1 = H, Me, R2 = Ph, 2-furyl) reacts with hydrazine. III (R2 = Ph, R3 = Et) and I (R = Q, R1 = H) could be cyclized to pyrazolo[4',5':5,4]pyrimidobenzimidazoles IV (R4 = Ph, R5 = NH2; R4 = Me, R5 = NHAc; resp.).

IT 134259-21-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 134259-21-5 CAPLUS

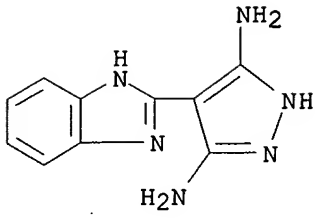
CN 1H-Pyrazole-3,5-diamine, 4-(5,6-dimethyl-1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



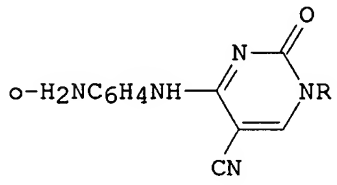
IT 134259-20-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, acylation and intramol. cyclocondensation of)

RN 134259-20-4 CAPLUS

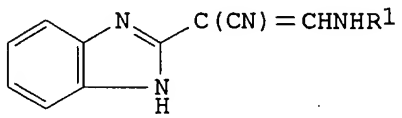
CN 1H-Pyrazole-3,5-diamine, 4-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



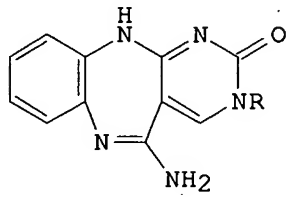
L5 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:5979 CAPLUS
DOCUMENT NUMBER: 108:5979
TITLE: Synthesis of pyrimidino[4,5-b][1,5]benzodiazepin-2-ones and pyrimidino[1,6-a]benzimidazol-1-ones from 4-[(ethoxycarbonyl)amino]-1H-1,5-benzodiazpine-3-carbonitrile via 4-(2-aminoanilino)pyrimidin-2(1H)-one-5-carbonitriles
AUTHOR(S): Takagi, Kaname; Aotsuka, Tomoji; Morita, Hikari; Okamoto, Yoshihisa
CORPORATE SOURCE: Cent. Res. Lab., Zeria Pharm. Co., Saitama, 360, Japan
SOURCE: Journal of Heterocyclic Chemistry (1986), 23(5), 1443-9
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 108:5979
GI



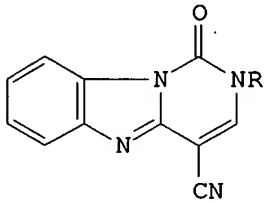
II



III



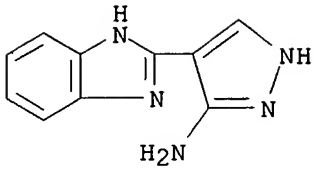
IV



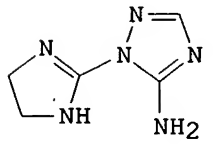
V

AB Reactions of 4-[(ethoxycarbonyl)amino]-1H-1,5-benzodiazepine-3-carbonitrile (I) with RNH2 (R = Me, Et, Pr, Me2CH, Bu, allyl, PhCH2, cyclohexyl) gave (aminoanilino)pyrimidinonecarbonitriles II. Analogous reactions of I with R1NH2 (R1 = Ph, p-MeOC6H4) afforded [anilino(cyanovinyl)]benzimidazoles III. Upon treatment with Et3N, II cyclized to give pyrimidinobenzodiazepinones IV. I reacted with p-MeC6H4SO3H to give pyrimidinobenzimidazolonecarbonitriles V. Mechanistic pathways are proposed to account for the products.

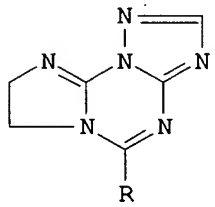
IT 111852-27-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 111852-27-8 CAPLUS
CN 1H-Pyrazol-3-amine, 4-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



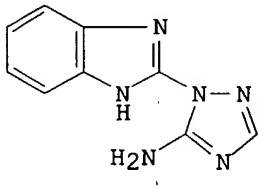
L5 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:575673 CAPLUS
DOCUMENT NUMBER: 99:175673
TITLE: New condensed tri- and tetracyclic 1,2,4-triazole ring systems
AUTHOR(S): Svetlik, Jan
CORPORATE SOURCE: Drug Res. Inst., Bratislava, 811 04, Czech.
SOURCE: Heterocycles (1983), 20(8), 1495-9
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 99:175673
GI



II

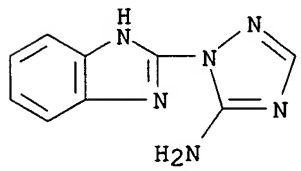


III



IV

AB The reaction of 2-hydrazino-2-imidazoline with HC(:NCN)OEt (I) gave triazoleamine derivative II. II was heated with RC(OEt)3 (R = H, Me) to give fused heterocycles III. 2-Hydrazinobenzimidazole was treated with I to yield triazoleamine derivative IV.
IT 87633-57-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclocondensation of, with ortho esters)
RN 87633-57-6 CAPLUS
CN 1H-1,2,4-Triazol-5-amine, 1-(1H-benzimidazol-2-yl)- (9CI) (CA INDEX NAME)



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L4           30 S L3 FULL
L5            9 S L4 AND PY<2002

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